

0260

OIPE

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/351,149

DATE: 07/28/1999
TIME: 15:00:19

Input Set: I351149.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

```
1 <110> APPLICANT: THORPE, PHILIP E.
2 RAN, SOPHIA
3 <120> TITLE OF INVENTION: CANCER TREATMENT KITS COMPRISING THERAPEUTIC CONJUGATES
4 THAT BIND TO AMINOPHOSPHOLIPIDS
5 <130> FILE REFERENCE: 4001.002383
6 <140> CURRENT APPLICATION NUMBER: US/09/351,149
7 <141> CURRENT FILING DATE: 1999-07-12
8 <160> NUMBER OF SEQ ID NOS: 5
9 <170> SOFTWARE: PatentIn Ver. 2.0
10 <210> SEQ ID NO 1
11 <211> LENGTH: 2149
12 <212> TYPE: DNA
13 <213> ORGANISM: Homo sapiens
14 <400> SEQUENCE: 1
15 cagctgactc aggcaggctc catgctgaac ggtcacacag agaggaaaca ataaatctca 60
16 gctactatgc aataaatatc tcaagtttta acgaagaaaa acatcattgc agtgaaataa 120
17 aaaattttta aatttttagaa caaagctaac aaatggctag ttttctatga ttcttcttca 180
18 aacgctttct ttgaggggga aagagtcaaa caaacaagca gttttacctg aaataaagaa 240
19 ctagttttag aggtcagaag aaaggagcaa gttttgcgag aggcacggaa ggagtgtgct 300
20 ggcagtacaa tgacagtttt cctttccttt gctttcctcg ctgccattct gactcacata 360
21 ggggtgcagca atcagcgccg aagtccagaa aacagtggga gaagatataa cgggattcaa 420
22 catgggcaat gtgcctacac tttcattctt ccagaacacg atggcaactg tcgtagagagt 480
23 acgacagacc agtacaacac aaacgctctg cagagagatg ctccacacgt ggaaccggat 540
24 ttctcttccc agaaacttca acatctggaa catgtgatgg aaaattatac tcagtggctg 600
25 caaaaacttg agaattacat tgtggaaaac atgaagtcgg agatggccca gatacagcag 660
26 aatgcagttc agaaccacac ggctaccatg ctggagatag gaaccagcct cctctctcag 720
27 actgcagagc agaccagaaa gctgacagat gttgagaccc aggtactaaa tcaaacttct 780
28 cgacttgaga tacagctgct ggagaattca ttatccacct acaagctaga gaagcaactt 840
29 cttcaacaga caaatgaaat cttgaagatc catgaaaaaa acagtttatt agaacataaa 900
30 atcttagaaa tggaaggaaa acacaaggaa gagttggaca ccttaaagga agagaaagag 960
31 aaccttcaag gcttggttac tcgtcaaaca tatataatcc aggagctgga aaagcaatta 1020
32 aacagagcta ccaccaacaa cagtgtcctt cagaagcagc aactggagct gatggacaca 1080
33 gtccacaacc ttgtcaatct ttgcactaaa gaaggtgttt tactaaaggg aggaaaaaga 1140
34 gaggaagaga aaccatttag agactgtgca gatgtatatc aagctggttt taataaaagt 1200
35 ggaatctaca ctatttatat taataatatg ccagaaccca aaaagggtgtt ttgcaatatg 1260
36 gatgtcaatg ggggaggttg gactgtaata caacatcgtg aagatggaag tctagatttc 1320
37 caaagaggct ggaaggaata taaaatgggt tttggaaatc cctccggtga atattggctg 1380
38 gggaatgagt ttatttttgc cattaccagt cagaggcagt acatgctaag aattgagtta 1440
39 atggactggg aagggaaacc agcctattca cagtatgaca gattccacat aggaaatgaa 1500
40 aagcaaaact ataggttgta tttaaaagggt cacactggga cagcaggaaa acagagcagc 1560
41 ctgatcttac acggtgctga tttcagcact aaagatgctg ataatgacaa ctgtatgtgc 1620
42 aaatgtgccc tcatgttaac aggaggatgg tggtttgatg cttgtggccc ctccaatcta 1680
43 aatggaatgt tctatactgc gggacaaaac catggaaaac tgaatgggat aaagtggcac 1740
44 tacttcaaag ggcccagtta ctccctacgt tccacaacta tgatgattcg acctttagat 1800
```

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/351,149

DATE: 07/28/1999
TIME: 15:00:19

Input Set: I351149.RAW

```

45      ttttgaaagc gcaatgtcag aagcgattat gaaagcaaca aagaaatccg gagaagctgc 1860
46      caggtgagaa actgtttgaa aacttcagaa gcaaacaata ttgtctccct tccagcaata 1920
47      agtggtagtt atgtgaagtc accaagggtc ttgaccgtga atctggagcc gtttgagttc 1980
48      acaagagtct ctacttgggg tgacagtgc cactgggctc gactatagaa aactccactg 2040
49      actgtcgggc tttaaaaagg gaagaaactg ctgagcttgc tgtgcttcaa actactactg 2100
50      gaccttattt tggaactatg gtagccagat gataaatatg gttaatttc      2149

```

51 <210> SEQ ID NO 2

52 <211> LENGTH: 498

53 <212> TYPE: PRT

54 <213> ORGANISM: Homo sapiens

55 <400> SEQUENCE: 2

```

56      Met Thr Val Phe Leu Ser Phe Ala Phe Leu Ala Ala Ile Leu Thr His
57      1          5          10          15
58      Ile Gly Cys Ser Asn Gln Arg Arg Ser Pro Glu Asn Ser Gly Arg Arg
59      20          25          30
60      Tyr Asn Arg Ile Gln His Gly Gln Cys Ala Tyr Thr Phe Ile Leu Pro
61      35          40          45
62      Glu His Asp Gly Asn Cys Arg Glu Ser Thr Thr Asp Gln Tyr Asn Thr
63      50          55          60
64      Asn Ala Leu Gln Arg Asp Ala Pro His Val Glu Pro Asp Phe Ser Ser
65      65          70          75          80
66      Gln Lys Leu Gln His Leu Glu His Val Met Glu Asn Tyr Thr Gln Trp
67      85          90          95
68      Leu Gln Lys Leu Glu Asn Tyr Ile Val Glu Asn Met Lys Ser Glu Met
69      100         105         110
70      Ala Gln Ile Gln Gln Asn Ala Val Gln Asn His Thr Ala Thr Met Leu
71      115         120         125
72      Glu Ile Gly Thr Ser Leu Leu Ser Gln Thr Ala Glu Gln Thr Arg Lys
73      130         135         140
74      Leu Thr Asp Val Glu Thr Gln Val Leu Asn Gln Thr Ser Arg Leu Glu
75      145         150         155         160
76      Ile Gln Leu Leu Glu Asn Ser Leu Ser Thr Tyr Lys Leu Glu Lys Gln
77      165         170         175
78      Leu Leu Gln Gln Thr Asn Glu Ile Leu Lys Ile His Glu Lys Asn Ser
79      180         185         190
80      Leu Leu Glu His Lys Ile Leu Glu Met Glu Gly Lys His Lys Glu Glu
81      195         200         205
82      Leu Asp Thr Leu Lys Glu Glu Lys Glu Asn Leu Gln Gly Leu Val Thr
83      210         215         220
84      Arg Gln Thr Tyr Ile Ile Gln Glu Leu Glu Lys Gln Leu Asn Arg Ala
85      225         230         235         240
86      Thr Thr Asn Asn Ser Val Leu Gln Lys Gln Gln Leu Glu Leu Met Asp
87      245         250         255
88      Thr Val His Asn Leu Val Asn Leu Cys Thr Lys Glu Gly Val Leu Leu
89      260         265         270
90      Lys Gly Gly Lys Arg Glu Glu Glu Lys Pro Phe Arg Asp Cys Ala Asp
91      275         280         285
92      Val Tyr Gln Ala Gly Phe Asn Lys Ser Gly Ile Tyr Thr Ile Tyr Ile
93      290         295         300
94      Asn Asn Met Pro Glu Pro Lys Lys Val Phe Cys Asn Met Asp Val Asn

```

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/351,149

DATE: 07/28/1999
TIME: 15:00:19

Input Set: I351149.RAW

```

95      305      310      315      320
96      Gly Gly Gly Trp Thr Val Ile Gln His Arg Glu Asp Gly Ser Leu Asp
97              325              330              335
98      Phe Gln Arg Gly Trp Lys Glu Tyr Lys Met Gly Phe Gly Asn Pro Ser
99              340              345              350
100     Gly Glu Tyr Trp Leu Gly Asn Glu Phe Ile Phe Ala Ile Thr Ser Gln
101              355              360              365
102     Arg Gln Tyr Met Leu Arg Ile Glu Leu Met Asp Trp Glu Gly Asn Arg
103              370              375              380
104     Ala Tyr Ser Gln Tyr Asp Arg Phe His Ile Gly Asn Glu Lys Gln Asn
105              385              390              395              400
106     Tyr Arg Leu Tyr Leu Lys Gly His Thr Gly Thr Ala Gly Lys Gln Ser
107              405              410              415
108     Ser Leu Ile Leu His Gly Ala Asp Phe Ser Thr Lys Asp Ala Asp Asn
109              420              425              430
110     Asp Asn Cys Met Cys Lys Cys Ala Leu Met Leu Thr Gly Gly Trp Trp
111              435              440              445
112     Phe Asp Ala Cys Gly Pro Ser Asn Leu Asn Gly Met Phe Tyr Thr Ala
113              450              455              460
114     Gly Gln Asn His Gly Lys Leu Asn Gly Ile Lys Trp His Tyr Phe Lys
115              465              470              475              480
116     Gly Pro Ser Tyr Ser Leu Arg Ser Thr Thr Met Met Ile Arg Pro Leu
117              485              490              495
118     Asp Phe
119 <210> SEQ ID NO 3
120 <211> LENGTH: 2269
121 <212> TYPE: DNA
122 <213> ORGANISM: Homo sapiens
123 <400> SEQUENCE: 3
124     tgggttggtg tttatctcct ccagccttg agggaggga caacactgta ggatctgggg 60
125     agagaggaac aaaggaccgt gaaagctgct ctgtaaaaagc tgacacagcc ctcccaagtg 120
126     agcaggactg ttcttccac tgcaatctga cagtttactg catgcctgga gagaacacag 180
127     cagtaaaaac caggtttgct actggaaaaa gaggaagag aagactttca ttgacggacc 240
128     cagccatggc agcgtagcag ccctgcgttt cagacggcag cagctcgga ctctggacgt 300
129     gtgtttgccc tcaagtttgc taagctgctg gtttattact gaagaaagaa tgtggcagat 360
130     tgttttcttt actctgagct gtgatcttgt cttggccgca gcctataaca actttcggaa 420
131     gagcatggac agcataggaa agaagcaata tcagggtccag catgggtcct gcagctacac 480
132     tttcctcctg ccagagatgg acaactgccg ctcttcctcc agcccctacg tgtccaatgc 540
133     tgtgcagagg gacgcgccgc tcgaatacga tgactcgggtg cagaggctgc aagtgtgga 600
134     gaacatcatg gaaaacaaca ctcaagtggc aatgaagctt gagaattata tccaggacaa 660
135     catgaagaaa gaaatggtag agatacagca gaatgcagta cagaaccaga cggctgtgat 720
136     gatagaaata gggacaaacc tgttgaacca aacagctgag caaacgcgga agttaactga 780
137     tgtggaagcc caagtattaa atcagaccac gagacttgaa cttcagctct tggaaactc 840
138     cctctcgaca aacaaattgg aaaaacagat tttggaccag accagtgaaa taaacaaatt 900
139     gcaagataag aacagtttcc tagaaaagaa ggtgctagct atggaagaca agcacatcat 960
140     ccaactacag tcaataaaag aagagaaaaga tcagctacag gtgttagtat ccaagcaaaa 1020
141     ttccatcatt gaagaactag aaaaaaaaaat agtgactgcc acggtgaata attcagttct 1080
142     tcaaaagcag caacatgatc tcatggagac agttaataac ttactgacta tgatgtccac 1140
143     atcaaaactca gctaaggacc ccactgttgc taaagaagaa caaatcagct tcagagactg 1200
144     tgctgaagta ttcaaactcag gacacaccac aaatggcatc tacacgttaa cattccctaa 1260

```

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/351,149

DATE: 07/28/1999
TIME: 15:00:19

Input Set: I351149.RAW

```

145   ttctacagaa gagatcaagg cctactgtga catggaagct ggaggaggcg ggtggacaat 1320
146   tattcagcga cgtgaggatg gcagcgttga ttttcagagg acttggaag aatataaagt 1380
147   gggatttggt aacccttcag gagaatattg gctgggaaat gagtttggtt cgcaactgac 1440
148   taatcagcaa cgctatgtgc ttaaaataca ccttaaagac tgggaaggga atgaggctta 1500
149   ctcatgttat gaacatttct atctctcaag tgaagaactc aattatagga ttcaccttaa 1560
150   aggacttaca gggacagccg gcaaaataag cagcatcagc caaccaggaa atgattttag 1620
151   cacaaaggat ggagacaacg acaaagtgtat ttgcaaagt tcaaaaatgc taacaggagg 1680
152   ctggtggttt gatgcatgtg gtccttccaa cttgaacgga atgtactatc cacagaggca 1740
153   gaacacaaat aagttcaacg gcattaaatg gtactactgg aaaggctcag gctattcgct 1800
154   caaggccaca accatgatga tccgaccagc agattttctaa acatcccagt ccacctgagg 1860
155   aactgtctcg aactattttc aaagacttaa gcccagtgca ctgaaagtca cggctgcgca 1920
156   ctgtgtcctc ttccaccaca gagggcgtgt gctcgggtgt gacgggaccc acatgctcca 1980
157   gattagagcc tgtaaacttt atcacttaaa cttgcatcac ttaacggacc aaagcaagac 2040
158   cctaaacatc cataattgtg attagacaga acacctatgc aaagatgaac ccgaggctga 2100
159   gaatcagact gacagtttac agacgctgct gtcacaacca agaattgtat gtgcaagttt 2160
160   atcagtaaat aactggaaaa cagaacactt atgttataca atacagatca tcttggaact 2220
161   gcattcttct gagcactgtt tatacactgt gtaaataccc atatgtcct 2269

```

<210> SEQ ID NO 4

<211> LENGTH: 496

<212> TYPE: PRT

<213> ORGANISM: Homo sapiens

<400> SEQUENCE: 4

```

167   Met Trp Gln Ile Val Phe Phe Thr Leu Ser Cys Asp Leu Val Leu Ala
168       1               5               10               15
169   Ala Ala Tyr Asn Asn Phe Arg Lys Ser Met Asp Ser Ile Gly Lys Lys
170               20               25               30
171   Gln Tyr Gln Val Gln His Gly Ser Cys Ser Tyr Thr Phe Leu Leu Pro
172       35               40               45
173   Glu Met Asp Asn Cys Arg Ser Ser Ser Ser Pro Tyr Val Ser Asn Ala
174       50               55               60
175   Val Gln Arg Asp Ala Pro Leu Glu Tyr Asp Asp Ser Val Gln Arg Leu
176       65               70               75               80
177   Gln Val Leu Glu Asn Ile Met Glu Asn Asn Thr Gln Trp Leu Met Lys
178               85               90               95
179   Leu Glu Asn Tyr Ile Gln Asp Asn Met Lys Lys Glu Met Val Glu Ile
180               100              105              110
181   Gln Gln Asn Ala Val Gln Asn Gln Thr Ala Val Met Ile Glu Ile Gly
182               115              120              125
183   Thr Asn Leu Leu Asn Gln Thr Ala Glu Gln Thr Arg Lys Leu Thr Asp
184               130              135              140
185   Val Glu Ala Gln Val Leu Asn Gln Thr Thr Arg Leu Glu Leu Gln Leu
186       145              150              155              160
187   Leu Glu His Ser Leu Ser Thr Asn Lys Leu Glu Lys Gln Ile Leu Asp
188               165              170              175
189   Gln Thr Ser Glu Ile Asn Lys Leu Gln Asp Lys Asn Ser Phe Leu Glu
190               180              185              190
191   Lys Lys Val Leu Ala Met Glu Asp Lys His Ile Ile Gln Leu Gln Ser
192               195              200              205
193   Ile Lys Glu Glu Lys Asp Gln Leu Gln Val Leu Val Ser Lys Gln Asn
194       210              215              220

```

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/351,149

DATE: 07/28/1999
TIME: 15:00:19

Input Set: I351149.RAW

```

195      Ser Ile Ile Glu Glu Leu Glu Lys Lys Ile Val Thr Ala Thr Val Asn
196      225                      230                      235                      240
197      Asn Ser Val Leu Gln Lys Gln Gln His Asp Leu Met Glu Thr Val Asn
198                      245                      250                      255
199      Asn Leu Leu Thr Met Met Ser Thr Ser Asn Ser Ala Lys Asp Pro Thr
200                      260                      265                      270
201      Val Ala Lys Glu Glu Gln Ile Ser Phe Arg Asp Cys Ala Glu Val Phe
202                      275                      280                      285
203      Lys Ser Gly His Thr Thr Asn Gly Ile Tyr Thr Leu Thr Phe Pro Asn
204                      290                      295                      300
205      Ser Thr Glu Glu Ile Lys Ala Tyr Cys Asp Met Glu Ala Gly Gly Gly
206      305                      310                      315                      320
207      Gly Trp Thr Ile Ile Gln Arg Arg Glu Asp Gly Ser Val Asp Phe Gln
208                      325                      330                      335
209      Arg Thr Trp Lys Glu Tyr Lys Val Gly Phe Gly Asn Pro Ser Gly Glu
210                      340                      345                      350
211      Tyr Trp Leu Gly Asn Glu Phe Val Ser Gln Leu Thr Asn Gln Gln Arg
212                      355                      360                      365
213      Tyr Val Leu Lys Ile His Leu Lys Asp Trp Glu Gly Asn Glu Ala Tyr
214                      370                      375                      380
215      Ser Leu Tyr Glu His Phe Tyr Leu Ser Ser Glu Glu Leu Asn Tyr Arg
216      385                      390                      395                      400
217      Ile His Leu Lys Gly Leu Thr Gly Thr Ala Gly Lys Ile Ser Ser Ile
218                      405                      410                      415
219      Ser Gln Pro Gly Asn Asp Phe Ser Thr Lys Asp Gly Asp Asn Asp Lys
220                      420                      425                      430
221      Cys Ile Cys Lys Cys Ser Gln Met Leu Thr Gly Gly Trp Trp Phe Asp
222                      435                      440                      445
223      Ala Cys Gly Pro Ser Asn Leu Asn Gly Met Tyr Tyr Pro Gln Arg Gln
224                      450                      455                      460
225      Asn Thr Asn Lys Phe Asn Gly Ile Lys Trp Tyr Tyr Trp Lys Gly Ser
226      465                      470                      475                      480
227      Gly Tyr Ser Leu Lys Ala Thr Thr Met Met Ile Arg Pro Ala Asp Phe
228                      485                      490                      495
229      <210> SEQ ID NO 5
230      <211> LENGTH: 495
231      <212> TYPE: PRT
232      <213> ORGANISM: Homo sapiens
233      <400> SEQUENCE: 5
234      Met Trp Gln Ile Val Phe Phe Thr Leu Ser Cys Asp Leu Val Leu Ala
235      1                      5                      10                      15
236      Ala Ala Tyr Asn Asn Phe Arg Lys Ser Met Asp Ser Ile Gly Lys Lys
237                      20                      25                      30
238      Gln Tyr Gln Val Gln His Gly Ser Cys Ser Tyr Thr Phe Leu Leu Pro
239                      35                      40                      45
240      Glu Met Asp Asn Cys Arg Ser Ser Ser Ser Pro Tyr Val Ser Asn Ala
241                      50                      55                      60
242      Val Gln Arg Asp Ala Pro Leu Glu Tyr Asp Phe Ser Ser Gln Lys Leu
243      65                      70                      75                      80
244      Gln His Leu Glu His Val Met Glu Asn Tyr Thr Gln Trp Leu Gln Lys

```

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/351,149

DATE: 07/28/1999
TIME: 15:00:19

Input Set: I351149.RAW

Line ? Error/Warning

Original Text
